Iowa Clean Cities Coalition Recent Developments & Future Plans

Presenters: Jordan Vaughan Stephanie Weisenbach



New Home for Iowa Clean Cities Coalition

- » October 7th, 2011, ICCC moved to the newly created lowa Economic Development Authority (formerly the lowa Department of Economic Development)
- » New physical location:200 East Grand AvenueDes Moines, IA 50309
- » Same contact info:

www.iowacleancities.org
www.iowaeconomicdevelopment.com



Co-coordinators for Iowa Clean Cities

» Stephanie Weisenbach

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- With IEDA (IDED) since November 2008
- Community Development Division: sustainability, rural development, partnerships with local governments and economic development organizations.
- » Jordan Vaughan

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- Transferred from Iowa Office of Energy Independence
- With Iowa Clean Cities for 1 year



Recent Happenings in Iowa

- » First CNG Fast Fill Station to be opened by Dec 31, 2011.
- » Located in Grimes, IA, just off I-35 and I-80.





Iowa CCC Stakeholder Company Highlights & Recent Developments

» NatGas Services, L.C. (CNG services)

Based in Ankeny (Central Iowa)

» Flex Fuel US

Based in Chicago with a location in Mason City (North Central Iowa)

» American Power Group

Based in Algona (Northwest Iowa)



Iowa CCC Stakeholder Company Highlights & Recent Developments



Natural Gas...The **domestic** alternative fuel



» Vehicle Conversions

EPA certified and non-EPA certified kits

» Time-Fill CNG

Sales, installation, and maintenance: personal vehicles and small/medium/ large fleets

» Fast-Fill CNG

Sales, installation and maintenance: both private and public fueling stations

» Public CNG Fast-Fill Stations

 lowa's first public CNG fueling station: located at a BP Amoco and owned/operated by NatGas Services, L.C. More to come!

» Compressed Natural Gas Sales and Delivery

NatGas Services sells natural gas to a company and can deliver it out of state



Nanobox to be installed at lowa's first public fast-fill CNG station

in Grimes, IA.

On Hwy 141 about
 1 mile north of Interstate 80
 near the convergence of
 I-80 and I-35 in Central Iowa.





- » "BIG-Q" Official BRC Fuelmaker name is FMQ-8-36
- » Time-fill unit fills 3.7 GGEs (gas gallon equivalents) hourly
- » Rated as an appliance
- » Economical solution in fleet applications that are available to "fuel up" overnight, or during a time period when the fleet is not in use



- » Officially known as BRC Fuelmaker's "PHILL"
- » Fuels 0.4 GGEs (gas gallon equivalents) hourly
- » Rated as an appliance
- » Used for residential refueling





Iowa CCC Stakeholder Company Highlights & Recent Developments





Overview

- » Developed an technology which converts gasoline powered vehicles to be flex fuel capable
- » Installs retrofit kits to convert vehicles built before 1998 to use higher blends of ethanol (E-85)
- » Over 150 converted vehicles on the road today (including out of state, especially city of Chicago)
- » Received ARRA grant to install 30 conversion systems in lowa: included national guard, police vehicles
- » Payback less than 3 years, often a good solution for fleets with older vehicles and E-85 available



Developments

- » EPA Certified Technology
- » GSA approved and listed
- » Technology has been reviewed and tested by EPA, GSA and Oak Ridge National Labs
- » Flex Fuel certifies the system by engine families and currently have 11 engine families certified (do not require for vehicles for over 100K miles or 12+ years older)



Lessons Learned

- » Flex Fuel US fleet data has indicated that the use of E85 doesn't reduce fuel economy as significantly as it's often portrayed.
- » Job opportunities:
 - Growth at Mason City location
 - Car dealerships and local installers will install the kits
 - Assist in retaining or expanding ethanol plant(s)
 - Purchase parts from lowa manufacturers
 - North Iowa Area Community College's Automotive Technology program will be the inaugural training site for certified installers.



Lessons Learned

- » Public education needs and perceptions Flex Fuel US has encountered:
 - People aren't aware which retail stations offered E85 fuel
 - The majority knew that using E85 would reduce your fuel economy but weren't clear about what level of loss to expect or the breakeven pricing necessary to save money using the fuel.
 - People did not know that a legal flex fuel conversion technology was available in the market.
 - Most of the people who were aware of conversion systems were not aware that an EPA certified system would not void the factory warranty on the vehicle.



Iowa CCC Stakeholder Company Highlights & Recent Developments





American Power Group

- » Offers products to retrofit over-the-road (OTR) trucks with their dual fuel CNG/diesel OBD-II compliant system. Over 1,000 diesel generators and diesel engines have been converted to APG's dual fuel technology in North and South America, Africa, India, Australia, Pakistan, and Egypt.
- » First company to receive exemption under the EPA Alternative Vehicle Conversion Rule.
- » Converts existing diesel engines to have the flexibility to run on:
 - Diesel Fuel and compressed natural gas ("CNG") or liquefied natural gas ("LNG")
 - Diesel Fuel and Pipeline Gas or Well-Head Gas
 - Diesel Fuel and Bio-Methane, or
 - Have the flexibility to seamlessly go back to 100% diesel fuel when needed.



Iowa CCC Future Plans

Iowa Economic Development Authority integration

- » Integrate existing collaborations to advance Clean Cities' goals
- » Database resource of lowa businesses classified by business type, can use to target fleets.
- » Branding and build upon private/public partnership



Iowa CCC Future Plans

» Reach out to existing organizations' events that have ties to local government fleets:

- a. Iowa Chapter of American Public Works Association Meetings/Conference
- b. Iowa Recycling Association and Society of Solid Waste Operations Joint Annual Conference
- c. Iowa League of Cities Conference or Targeted Training Event
- d. School Administrators of Iowa Annual Conference
- e. County Engineers Association Regular Training Event or Annual Conference
- f. Secondary Roads Superintendents Regular Training Event
- g. Transit Bus Rodeo (annual)
- h. Iowa Garbage Truck Rodeo (annual)
- i. Iowa Snow-Plow Rodeo (annual)
- j. Iowa State Police Association Conference
- k. Iowa Automotive Dealers Association Meetings



Iowa CCC Future Plans

- » Fundraising and membership levels: Curious to discuss with other Clean Cities Coalitions
 - Setting initial \$ levels / benefits, the "pitch" to stakeholders that are used to free services
 - Targeting types of members (fleets, fuel/ technology providers, others)
 - Phases of a membership fundraising drive
 - Transitions from government to non-profit, a possibility years down the road for lowa.



Iowa Clean Cities Coalition

THANK YOU!

